IN THE UNITED STATES PATENT AND TRADEMARK OFFICE

Application No.   : 09/865,773   Confirmation No. : 5757
First Named Inventor   : Aruna Rohra Suda
Filed   : May 25, 2001
TC/A.U.   : 2165
Examiner   : Christyann Pulliam
Docket No.   : 103251.58983US
Customer No.   : 23911
Title   : System and Method for Saving Browsed Data

APPEAL BRIEF

Mail Stop Appeal Brief- Patents
Commissioner for Patents
P.O. Box 1450
Alexandria, VA 22313-1450

Sir:

On September 3, 2008, Appellant appealed to the Board of Patent Appeals

from the final rejection of claims 1, 50, 52-57, 59-61, 63, 64, 66, 67, 69, 72, 73, 75-

77, 93, 97, 99, 101-145 and 147-178.   The following is Appellant's Appeal Brief

submitted pursuant to 37 C.F.R. § 1.192.

I.   REAL PARTY IN INTEREST

An assignment of the present application to Saora Kabushiki Kaisha

recorded at reel/frame 015935/0622, which represents the real party in interest.

II.   RELATED APPEALS AND INTERFERENCES

Appellant is not aware of any appeals, interferences or other proceedings

which may be related to, directly affect or be directly affected by or have a

bearing on the Board's decision in the pending appeal.

III.   STATUS OF CLAIMS

Claims 1, 50, 52-57, 59-61, 63, 64, 66, 67, 69, 72, 73, 75-77, 93, 97, 99, 101-145 and 147-178 remain pending and are the subject of this appeal. Claims 2-49, 51, 58, 62, 65, 68, 70, 71, 74, 78-92, 94-96, 98, 100 and 146 have been cancelled.

IV.   STATUS OF AMENDMENTS

An After-Final Reply was filed on August 11, 2008, amending claims 1, 125, 126 and 142, and canceling claim 146. The Advisory Action mailed on August 22, 2008, indicates that these amendments will be entered for purposes of Appeal and that these amendments overcome the rejections under 35 U.S.C. § § 101 and 112, second paragraph.

V.   SUMMARY OF CLAIMED SUBJECT MATTER

Exemplary embodiments of the present invention are directed to systems and methods for saving data acquired by a web browser. An exemplary web browser is illustrated in Figure 24 of the present application (reproduced below).
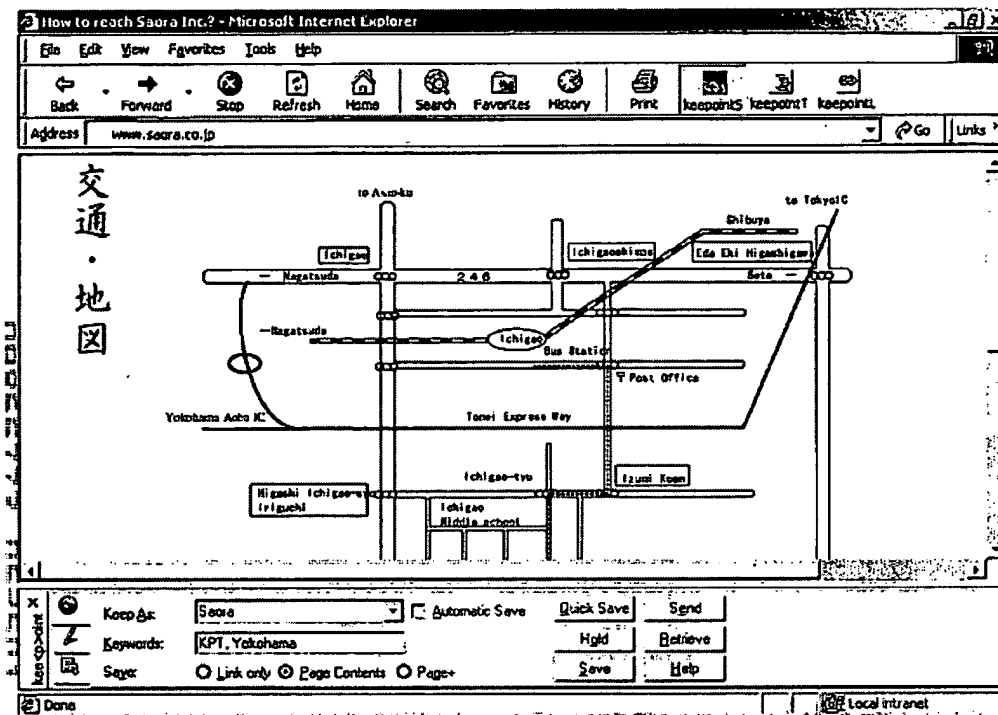

FIGURE 24

According to one aspect of the claimed invention web page data acquired by a web browser can be automatically saved by selecting the "Automatic Save" checkbox of the browser illustrated in Figure 24. This particularly advantageous because it allows a user of a browser to take a single action (i.e., select the checkbox) to save data from multiple web pages that are visited by the user without requiring the user to take extra steps to actually save the data for each web page.

In addition to saving the data acquired by a browser client, the claimed invention also extracts keywords from the content of the acquired web page data and indexes the keywords. The extracted and indexed keywords allow for later retrieval of web pages by time and date (as illustrated in Figure 37 reproduced below) and/or by keyword (as illustrated in Figure 38 reproduced below).
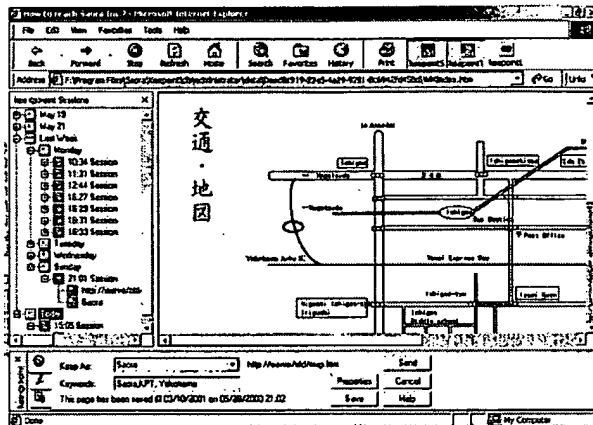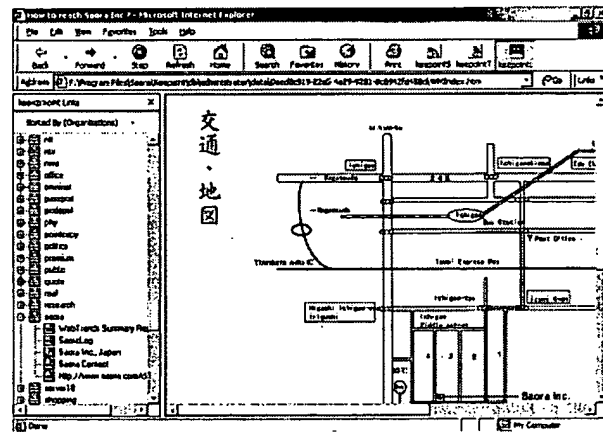

Figure 37

Figure 38

As illustrated in Figure 41 of the present application (reproduced below), a user can also retrieve pages by searching, with constraints by date, title, URL and/or keywords.

Figure 41

Exemplary embodiments of the present invention also provide for a variety of different arrangements for storing the acquired web page data, indices and extracted keywords. Thus, for example, Figure 71 of the present application (reproduced below) illustrates a client-server arrangement in which data acquired by Client1 and Client2 are stored in databases 406 of Server 1.
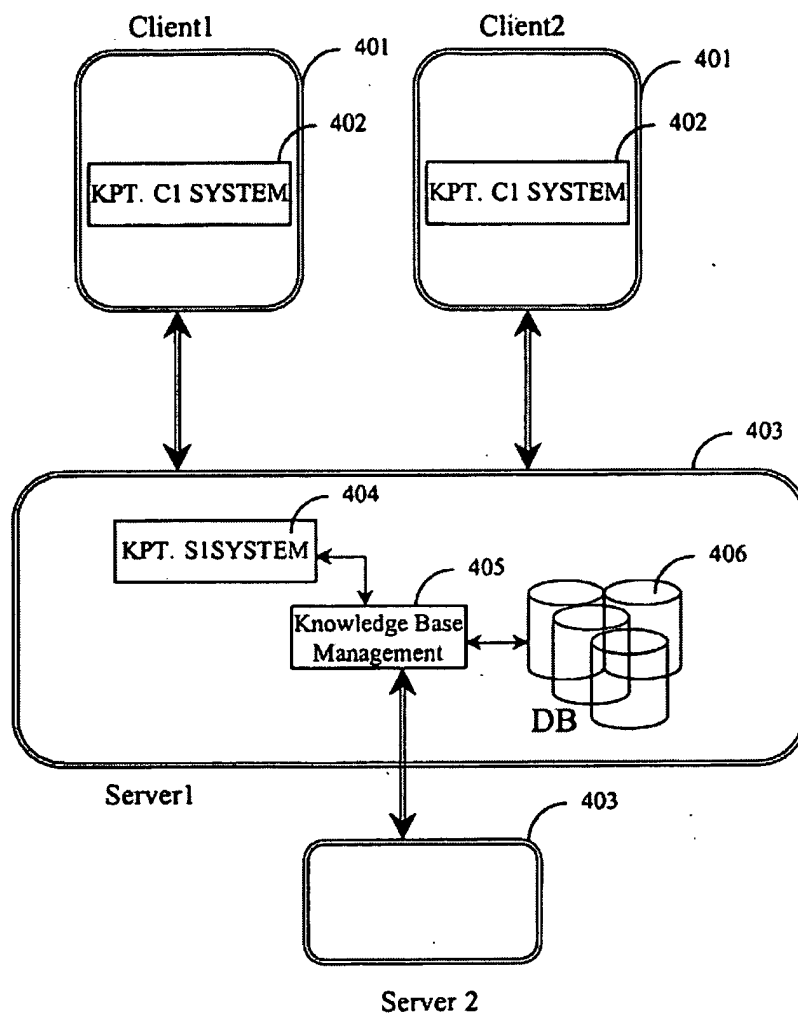
Figure 71

As illustrated in Figure 79 of the present application (reproduced below), the client-server implementation can also provide for the index database to be provided at Client1, which enables efficient processing and display of the information by the client because the client does not need to connect to the server to obtain the information stored in the index database.

Client1   701

702

KPT C4 System

703

Knowledge Base Management   Index DB

403

404

KPT. S1 System

405   406

Knowledge Base Management

DB

Server 1   403
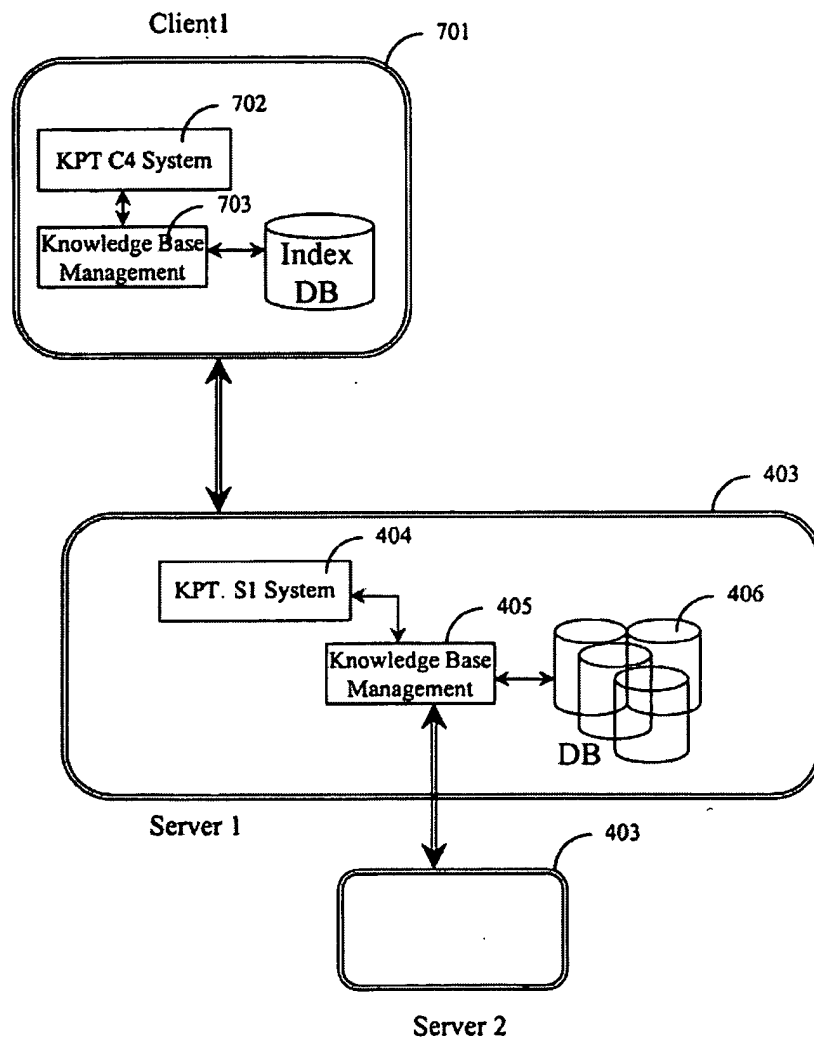
Server 2

Figure 79

Another exemplary arrangement is a file server type arrangement illustrated in Figure 77 (reproduced below). This arrangement differs from the client-server arrangement of Figure 71 in that all processing is performed on Client1 and Client2, while the database is still stored on Server1.
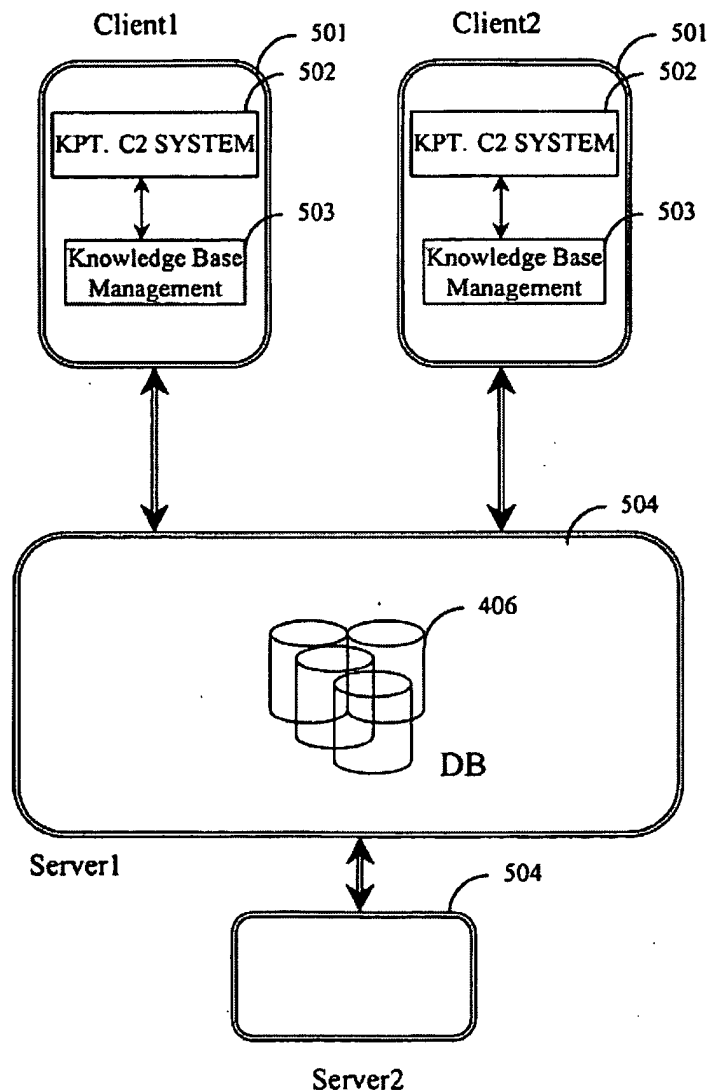
Figure 77

The present invention also provides for a distributed client implementation (illustrated in Figure 78 of the present application reproduced below) in which the processing and databases are stored by Client1, Client2 and Client3.
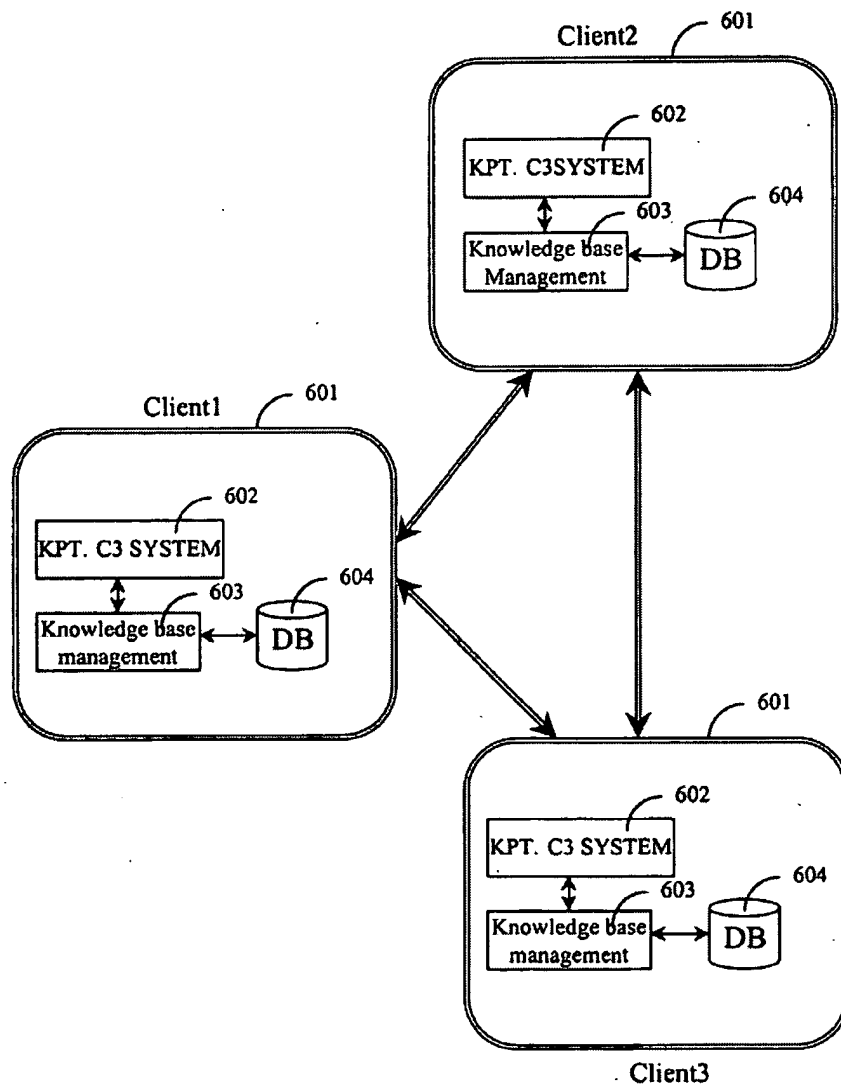
Figure 78

In yet another implementation, illustrated in Figure 81 of the present application (reproduced below), the clients are mere browsers and all processing and storage of information is performed by Web Server1.
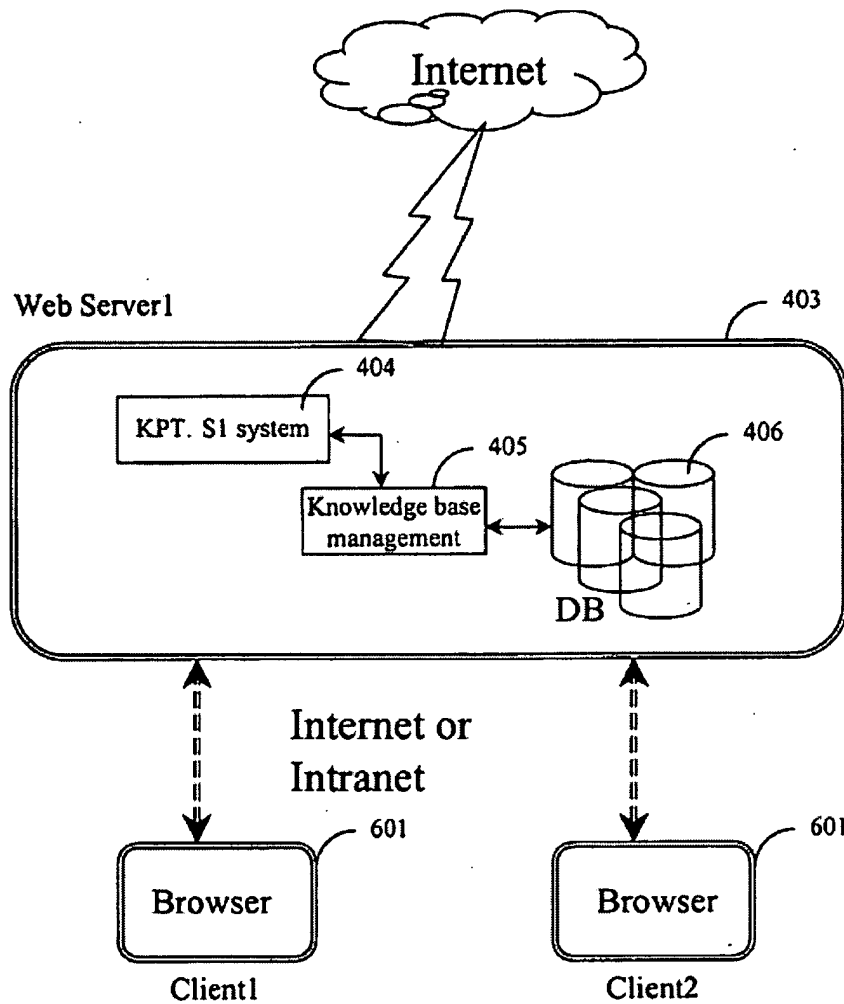
Figure 81

Claim 1

Claim 1 recites a system for saving web page data, including a processor 101 and a storage medium 102, 103 and/or 106 storing a computer-executable program.[1] The program comprises codes for causing said processor to perform as a data acquisition means[2] for acquiring a web page data browsed by a browser client when said browser client newly browses the web page data.[3] The codes also cause said processor to perform as keyword extraction means for extracting a keyword from a content of the acquired web page data.[4] The program codes further cause said processor to perform as indexing means for assigning a plurality of indices that include a first index unique to the acquired web page data and a second index comprising the extracted keyword to the acquired web page data.[5] The codes also cause said processor to perform as saving means for saving the acquired web page data in correspondence with the assigned indices in a predefined database, the saved web page data being sufficient to regenerate at least a portion of a previously browsed web page without accessing to the original source.[6] The codes further cause said processor to perform as a setting means for setting to save all the browsed data without any instruction by the user for each of the browsed data, wherein said saving means saves the data

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[1] Figures 1 and 2.

[2] As discussed in Appellants' Reply filed on August 11, 2008, the structure of the means-plus-function claims is disclosed as being a central processing unit (CPU) 101. Accordingly, the further citations for the means-plus-function claims will only be to the disclosure of the corresponding function.

[3] WebFetch() routine of Step 1503 of Figure 15, and Figure 16.

[4] Page 12, lines 9-11 and Figure 27.

[5] Page 31, lines 3-23 and Figures 65 and 66.

[6] *Id.*

browsed by the browser client when the browsing is operated to move to another URL.[7]

Claim 53

Claim 53 depends from claim 52 and further recites that at least one of said client apparatus comprises a client local database, a client web information storage device for storing web information acquired from an internet, and client administration means for administrating data in either of said database, said local database, and said web information storage device.[8]

Claim 54

Claim 54 depends from claim 1 and further recites that the database 406 is equipped in a server apparatus 504, and said data acquisition means, said indexing means, and said saving means are equipped in at least one client apparatus 501 connected to said server apparatus 504.[9]

Claim 55

Claim 55 depends from claim 1 and further recites that the system includes a plurality of client apparatuses 601, and said data acquisition means, said indexing means, said saving means, and said database are equipped in each of said client apparatuses 601, and each of said client apparatuses 601 can access the database 604 equipped in another client apparatus 601.[10]

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[7] Page 32, lines 18-20 and Figure 50.
[8] Figure 79.
[9] Figure 77. See, also, Figures 79 and 82.
[10] Figure 78. See, also, Figure 82.

Claim 56

Claim 56 depends from claim 1 and further recites that the database 406 is equipped in a server apparatus 403, and index database INDEX DB for storing the indices of said database is equipped in at least one client apparatus 701 connected to said server apparatus 403.[11]

Claim 57

Claim 57 depends from claim 1 and further recites that the data acquisition means, said indexing means, said saving means, and said database are equipped in a server apparatus 403, said data acquisition means acquires data in an internet, and said system further comprising at least one browser 601 connected to said server apparatus, each of said browser browses a web page in the internet via said server apparatus 403 and transmits a user action on the browsed web page to said server apparatus 403.[12]

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[11] Figure 79.
[12] Figure 81.

Claim 59

Claim 59 recites storage medium storing computer-executable program for controlling a computer to perform data processing for saving web page data. The program comprises codes for causing the computer to acquire web page data browsed by a browser client when said browser client newly browses the web page data.[13] The codes also cause the computer to extract a keyword from a content of the acquired web page data.[14] The codes further cause the computer to assign a plurality of indices that include a first index unique to the acquired web page data and a second index comprising the extracted keyword to the acquired web page data.[15] The codes also cause the computer to save the web page data in correspondence with the assigned indices in a predefined database, the saved web page data being sufficient to regenerate at least a portion of a previously browsed web page without accessing to the original source.[16]

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[13] WebFetch() routine of Steps 1503 of Figure 15, and Figure 16.
[14] Page 12, lines 9-11 and Figure 27.
[15] Page 31, lines 3-23 and Figures 65 and 66.
[16] *Id.*

Claim 60

Claim 60 recites a method of saving web page data. The method involves acquiring web page data browsed by a browser client when said browser client newly browses the web page data.[17] The method also involves extracting a keyword from a content of the acquired web page data.[18] The method further involves assigning a plurality of indices that include a first index unique to the acquired web page data and a second index comprising the extracted keyword to the acquired web page data.[19] The method also involves saving the acquired web page data in correspondence with the assigned indices in a predefined database, the saved web page data being sufficient to regenerate at least a portion of a previously browsed web page without accessing to the original source.[20]

Claim 73

Claim 73 depends from claim 72 and further recites assigning a predetermined file name to said newly browsed data.

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[17] WebFetch() routine of Steps 1503 of Figure 15, and Figure 16.
[18] Page 12, lines 9-11 and Figure 27.
[19] Page 31, lines 3-23 and Figures 65 and 66.
[20] *Id.*

Claim 93

Claim 93 recites a storage medium storing computer-executable program for controlling a computer to perform data processing for saving web page data. The program comprises codes for causing the computer to perform acquiring web page data browsed by a browser client when said browser client newly browses the web page data.[21] The codes cause the computer to perform extracting a keyword from a content of the acquired web page data requested for saving.[22] The codes causes the computer to perform assigning a plurality of indices that include a first index unique to the acquired web page data and a second index comprising the extracted keyword to the acquired web page data. The codes for cause the computer to perform determining whether a user requests saving of the acquired web page data.[23] The codes cause the computer to perform saving the requested data in correspondence with the assigned indices in a predefined database when it is determined that the user requests saving of the acquired web page data, the saved web page data being sufficient to regenerate at least a portion of a previously browsed web page without accessing to the original source.[24]

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[21] WebFetch() routine of Steps 1503 of Figure 15, and Figure 16.
[22] Page 12, lines 9-11 and Figure 27.
[23] Page 31, lines 3-23 and Figures 65 and 66.
[24] *Id.*

Page 16

Claim 99

Claim 99 recites a method of saving web page data. The method involves acquiring web page data browsed by a browser client when said browser client newly browses the web page data.[25] The method also involves extracting a keyword from a content of the acquired web page data.[26] The method further involves assigning a plurality of indices that include a first index unique to the acquired web page data and a second index comprising the extracted keyword to the acquired web page data.[27] The method also involves saving the acquired web page data in correspondence with the assigned indices in a predefined database, the saved web page data being sufficient to regenerate at least a portion of a previously browsed web page without accessing to the original source. The method further involves receiving a save instruction from a user, wherein the indices are assigned to the web page data in said assigning step and the web page data is saved in said saving step when the save instruction is received.[28]

Claim 108

Claim 108 depends from claim 59 and further recites that the saving involves creating a new folder for newly browsed data, assigning a predetermined name to the newly browsed data without intervention by a user, and saving the newly browsed data in a new folder with the assigned file name.[29]

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[25] WebFetch() routine of Steps 1503 of Figure 15, and Figure 16.
[26] Page 12, lines 9-11 and Figure 27.
[27] Page 31, lines 3-23 and Figures 65 and 66.
[28] *Id.*
[29] Page 31, lines 2-13 and page 32, lines 1-4.

Claim 109

Claim 109 depends from claim 108 and further recites that the new folder is created with a folder name created based on a predetermined rule.[30]

Claim 110

Claim 110 depends from claim 59 and further recites generating a unique file name to be assigned as the first index for the newly browsed data without intervention by a user.[31]

Claim 111

Claim 111 depends from claim 59 and further recites that the assignment of a plurality of indices includes acquiring a URL of the data from the browser as the second index.[32]

Claim 112

Claim 112 depends from claim 59 and further recites that the assignment of the plurality of indices includes acquiring a title embedded in the data from the browser as the second index.[33]

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[30] Page 31, lines 2-13.
[31] Page 32, lines 1-4.
[32] Page 31, lines 2-13.
[33] *Id.*

Claim 113

Claim 113 depends from claim 59 and further recites that the index includes a time when the data is saved.[34] Claim 113 also recites creating nodes corresponding to groups classified on the basis of the timing of saving, creating a hierarchy of nodes by dividing a group corresponding to a period into a plurality of sub group each corresponding to a shorter period and creating a node corresponding to each of sub group, and displaying a plurality of the created nodes in an order of saving.[35]

Claim 114

Claim 114 depends from claim 113 and further recites that each group corresponds to a network session.[36]

Claim 121

Claim 121 depends from claim 59 and further recites setting to save all the browsed data without any instruction by the user for each of the browsed data.[37]

Claim 122

Claim 122 depends from claim 121 and further recites that the browser client data is saved when the browsing is operated to move to another URL.[38]

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[34] Page 28, lines 4-15.
[35] Page 28, lines 4-15 and Figure 60.
[36] *Id.*
[37] Page 32, lines 18-20.
[38] *Id.*

Claim 145

Claim 145 depends from claim 59 and further recites receiving a save instruction from a user, wherein the assignment of the plurality of indices includes assigning the indices to the web page data, and the saving includes saving the web page data when the save instruction is received.[39]

Claim 147

Claim 147 recites a method of saving web page data by a system. The method involves acquiring web page data browsed by a browser client when said browser client newly browses the web page data.[40] The method further involves extracting a keyword from a content of the acquired web page data.[41] The method also involves assigning a plurality of indices that include a first index unique to the acquired web page data and a second index comprising the extracted keyword to the acquired web page data.[42] The method further involves saving the acquired web page data in correspondence with the assigned indices in a predefined database, the saved web page data being sufficient to regenerate at least a portion of a previously browsed web page without accessing to the original source, wherein the index includes a time when the data is saved.[43] The method also involves creating nodes corresponding to groups classified on the basis of the timing of saving. The method further involves creating a hierarchy of nodes by dividing a group corresponding to a period into a plurality of sub group each corresponding to a shorter period. The method also involves creating

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[39] Page 31, lines 14-23 and Figure 66.
[40] WebFetch() routine of Steps 1503 of Figure 15, and Figure 16.
[41] Page 12, lines 9-11 and Figure 27.
[42] Page 31, lines 3-23 and Figures 65 and 66.
[43] *Id.*

a node corresponding to each of sub group. The method further involves displaying a plurality of nodes the created nodes in an order of saving.

Claim 148

Claim 148 recites a method of saving web page data. The method involves acquiring web page data browsed by a browser client when said browser client newly browses the web page data.[44] The method involves extracting a keyword from a content of the web page data acquired from the browser client.[45] The method also involves assigning a plurality of indices that include a first index unique to the web page data acquired from the browser client and a second index comprising the extracted keyword to the web page data acquired from the browser client.[46] The method further involves saving the web page data acquired from the browser client in correspondence with the assigned indices in a predefined database, the saved web page data being sufficient to regenerate at least a portion of a previously browsed web page without accessing to the original source.[47]

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[44] WebFetch() routine of Steps 1503 of Figure 15, and Figure 16.
[45] Page 12, lines 9-11 and Figure 27.
[46] Page 31, lines 3-23 and Figures 65 and 66.
[47] *Id.*

VI.   GROUNDS OF REJECTION TO BE REVIEW ON APPEAL

Appellants request review of the following three obviousness rejections:

1. Claims 1, 59-61, 63, 64, 66, 67, 69, 93, 97, 99, 101-107, 111-132, 143-147 and 148 in view of the combination U.S. Patent No. 6,567,800 to Barrera et al. ("Barrera") and U.S. Patent No. 5,933,827 to Cole et al. ("Cole").

2. Claims 50, 52-57, 75-77 and 133-142 in view of the combination of Barrera, Cole and U.S. Patent No. 6,081,829 to Sidana ("Sidana").

3. Claims 72, 73 and 108-110 in view of the combination of Barrera, Cole and U.S. Patent No. 5,848,410 to Walls et al. ("Walls").

VII. ARGUMENT

A. The Combination of Barrera and Cole Does Not Render Obvious Claims 1, 59-61, 63, 64, 66, 67, 69, 93, 97, 99, 101-107, 111-132, 143-147 and 148

The combination of Barrera and Cole does not render Appellants' claims obvious because the combination does not disclose or suggest acquiring data in the same manner as required by Appellants' claims. Moreover, the combination does not disclose or suggest saving browsed data in the manner required by claims 1, 99, 121, 122 and 145. Additionally, one of ordinary skill in the art would not have been motivated to modify the automated collection techniques of Barrera and Cole to employ the claimed browser-based techniques. Finally, the combination does not disclose or suggest acquiring a URL in the manner required by claim 111 or acquiring a title in the manner required by claim 112.

1. The Combination of Barrera and Cole Does Not Disclose or Suggest Using Data Acquired in the Same Manner as Recited in Appellants' Independent Claims 1, 59, 60, 93, 99, 147 and 148

One fundamental distinction between Appellants' independent claims and the disclosures of Barrera and Cole is the manner in which data is acquired. In particular, Appellants' independent claims all require that the acquired web page data is:

1) web page data browsed by a browser client; and

2) acquired when the browser client newly browses the web page data.

In contrast, the web page data acquired by Barrera and Cole is acquired independent of a browser client and the acquiring is not related to when web page data is browsed by such a client.

Barrera Discloses a Browser-Independent Technique for Automatic Collection of Web Page Data

Barrera discloses a server-based search system that allows keyword searches of website content within selected categories.[48] Barrera discloses that previous search engines only provided for category-based keyword searches website descriptions, which may not identify relevant content when the keyword is within the content but not within the description.[49]

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[48] Abstract.
[49] Column 1, line 57-column 2, line 7.

Accordingly, as illustrated in Figure 6 of Barrera (reproduced below), the search engine of Barrera retrieves website content and correlates the website content with a category (steps 301 and 303).

```
┌────────────────────────────┐
│   RETRIEVE WEBSITE CONTENT  │──── 301
└────────────────────────────┘
               │
               ▼
┌────────────────────────────┐
│    STORE WEBSITE CONTENT    │──── 302
└────────────────────────────┘
               │
               ▼
┌────────────────────────────┐
│  CORRELATE A PIECE OF WEBSITE│
│   CONTENT WITH A CATEGORY   │──── 303
└────────────────────────────┘
               │
               ▼
┌────────────────────────────┐
│  RECEIVE A CATEGORY SELECTION│
│        FROM A USER          │──── 304
└────────────────────────────┘
               │
               ▼
┌────────────────────────────┐
│   RECEIVE A CONTENT SEARCH  │
│     REQUEST FROM A USER     │──── 305
└────────────────────────────┘
               │
               ▼
┌────────────────────────────┐
│   PERFORM A CONTENT SEARCH  │
│  REQUEST ON STORED CONTENT  │
│   THAT IS CORRELATED WITH   │──── 306
│    THE SELECTED CATEGORY    │
└────────────────────────────┘
               │
               ▼
┌────────────────────────────┐
│    SEND RESULTS OF SEARCH   │
│        TO THE USER          │──── 307
└────────────────────────────┘
```
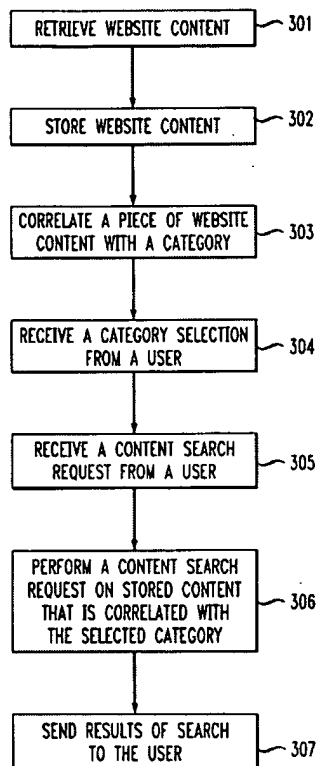
Figure 6

Barrera discloses automatically gathering website content using a spider.[50] Specifically, the system of Barrera employs "a computer program that *automatically* seeks out information (i.e., content) distributed on various nodes of a network (e.g., at websites on the Internet, or on an intranet) and sends it back to a predetermined location (e.g., the spider's "home server") such as a search

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[50] Column 4, lines 4-7.

computer shown as 501 in FIG. 5."[51] Thus, it is clear that the system of Barrera does not acquire "web page data *browsed by a browser client* when *said browser client newly browses* the web page data"[52] as recited in Appellants' independent claims.   In other words, the system of Barrera acquires web page data independent of a browser client by using a spider that *automatically* obtains web page content.   Recognizing the deficiencies of Barrera, the rejection relies upon Cole.   Cole, like Barrera, discloses obtaining web page data independent of a browser client.

Cole Discloses a Browser-Independent Technique for Automatic Collection of Web Page Data

Cole discloses a system for identifying new web pages of interest to a user.[53] As illustrated in Figure 2 of Cole (reproduced below), the system employs a server 10, which includes a profile building function 11, cataloging function 20, counter fields 37 and database 35.
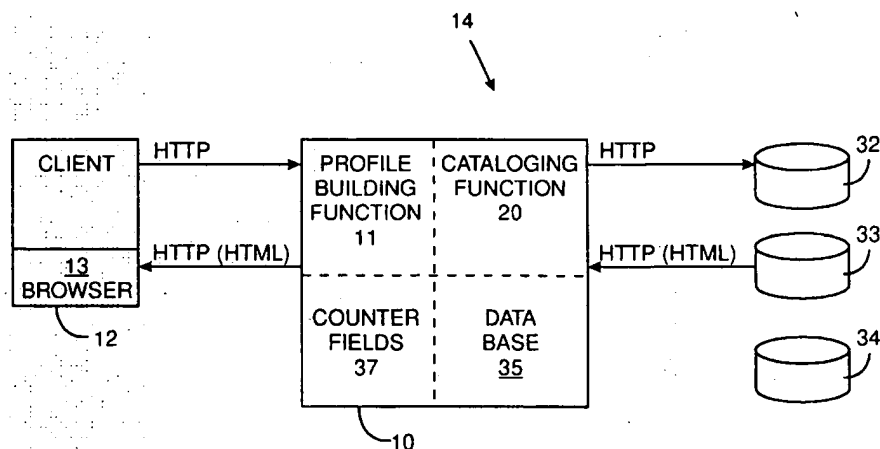

Figure 2

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[51] Column 4, lines 7-12. (Emphasis added).
[52] Emphasis added.
[53] Title.

Cataloging function 20 of server 10 periodically accesses databases 32-34 to add new data entries to database 35.[54] When a client performs a hierarchical category search or a keyword search, the search is performed by, and the results are provided by, cataloging function 20.[55] Based on category selection, keyword searches and/or URL selection, profile building function 11 builds a profile of client selections and responsive web pages. Thus, referring now to Figure 8 of Cole (reproduced below) when a client sends a request for new web pages of interest (step 400), profile building function 11 of server 10 generates, based on the client profile, a web page with URLs for web pages that have been updated within a particular period of time.[56]

```
        ┌──────────────────────┐
        │ RECEIVE CLIENT REQUEST │──400
        │     FOR WHAT IS NEW     │
        └──────────────────────┘
                   │
                   ▼
        ┌──────────────────────┐
        │   DETERMINE PROPER    │──404
        │      TIME WINDOW       │
        └──────────────────────┘
                   │
                   ▼
        ┌──────────────────────┐
        │  IDENTIFY DATA ENTRIES │──410
        │  FOR EACH CATEGORY IN  │
        │    CLIENT'S PROFILE     │
        └──────────────────────┘
                   │
                   ▼
        ┌──────────────────────────┐
        │ SEND HTML TO CLIENT LISTING│──420
        │   EACH CATEGORY IN CLIENT  │
        │  PROFILE AND ALL NEW URLS  │
        │      IN THE CATEGORIES     │
        └──────────────────────────┘
                   │
                   ▼
              ┌────────┐
              │  END   │
              └────────┘
```
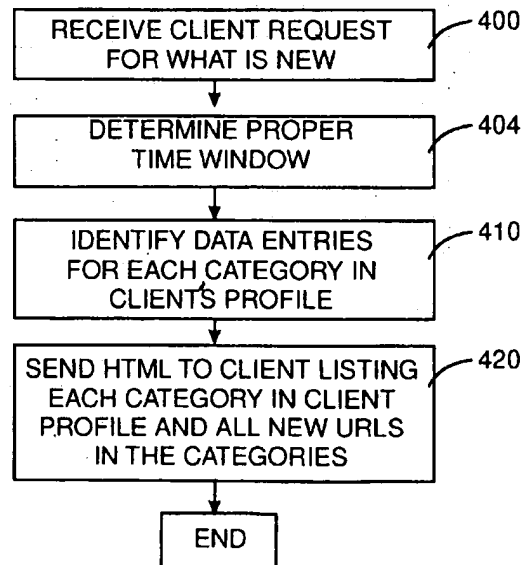
Figure 8

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[54] Column 3, lines 65-67.
[55] Column 4, lines 18-26 and 42-48, and column 5, lines 27-39 and 49-53.
[56] Column 6, lines 23-62 and Figure 8.

Figure 9 of Cole (reproduced below) illustrates the screen data of the

HTML generated in step 420 of the method of Figure 8 of Cole.[57]

"WHAT IS NEW" FOR CLIENT A'S INTERESTS FOR AUGUST 1-3:

RECREATION
   RE10
   RE11
   RE20
   RE21

SPORTS
   SP10
   SP11
   SP12
   SP20
   SP21
   SP22

GOLF
   GO30
   GO31

GAMES
   GA20

BUSINESS
   BU10
   BU11
   BU12
   BU13

Figure 9

In one embodiment of Cole, illustrated in Figure 10 (reproduced below),

the profile building function and counter fields are combined on one server 510

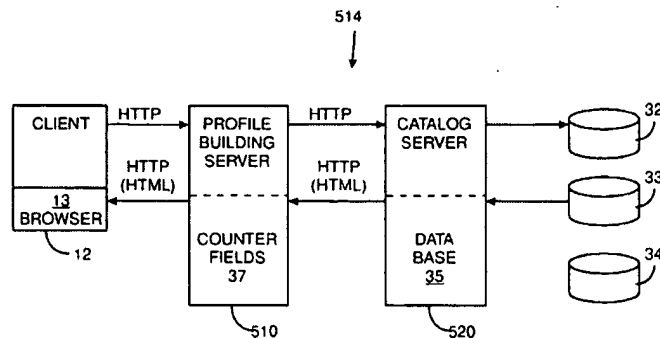and the cataloging and database functions are combined on another server 520.

Figure 10

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[57] Column 6, lines 60-62.

In connection with this embodiment Cole discloses a method, illustrated in Figure 11 (reproduced below), in which all new URLs/web pages are *automatically* requested by profile building server 510 from catalog server 520 at a particular time each day.
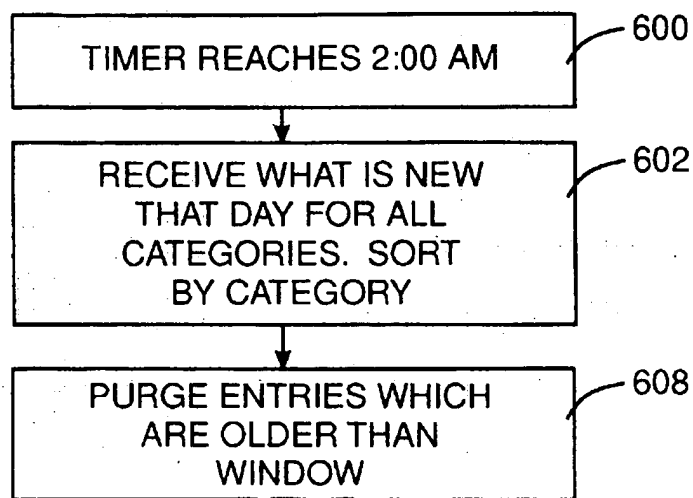
```
┌─────────────────────────────┐
│   TIMER REACHES 2:00 AM      │──  600
└─────────────────────────────┘
              │
              ▼
┌─────────────────────────────┐
│   RECEIVE WHAT IS NEW        │──  602
│   THAT DAY FOR ALL           │
│   CATEGORIES.  SORT          │
│   BY CATEGORY                │
└─────────────────────────────┘
              │
              ▼
┌─────────────────────────────┐
│   PURGE ENTRIES WHICH        │──  608
│   ARE OLDER THAN             │
│   WINDOW                     │
└─────────────────────────────┘
```

Figure 11

There is no disclosure or suggestion that web page data acquired by the catalog functions of Cole is acquired is data that is acquired "by a *browser client when said browser client newly browses* the web page data."[58] Thus, Cole, like Barrera, discloses a system in which servers acquire web page content *independent* of a client browser.

The rejection states that the claim recitation of "newly broses the web page data corresponds to categories containing new entries as detailed in fig 3,8

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[58] Emphasis added.

[of Cole]."[59] Regarding the citation to Figure 3 of Cole (reproduced below), this merely "illustrates daily additions to the database 35 by the cataloging function."[60]

"WHAT IS NEW" TO CATALOGING FUNCTION:

AUGUST 1, 1996	AUGUST 2, 1996	AUGUST 3, 1996
RECREATION	GAMES	EDUCATION
RE10	GA20	ED30
RE11		ED31
BUSINESS	SPORTS	GOLF
BU10	SP20	GO30
BU11	SP21	GO31
BU12	SP22	
BU13		
SPORTS	RECREATION	AVIATION
SP10	RE20	AV30
SP11	RE21	
SP12		

Figure 3

This information is obtained by server 10 on a *periodic basis*, such as a daily basis.[61] Thus, this information is not web page data "browsed by a browser client" and this information is not obtained "when said browser client newly browses the web page data."

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[59] Page 9.
[60] Column 4, lines 3-5.
[61] Column 3, lines 65-66.

Regarding the citation to Figure 7 of Cole (reproduced below), this is a flow chart of the keyword searching method of building the user profile.[62]

```
┌─────────────────────┐
│   RECEIVE CLIENT    │ ⟋300
│     REQUEST FOR     │
│  SERVER HOME PAGE   │
└─────────────────────┘
          ↓
┌─────────────────────┐
│   QUERY CATALOG     │ ⟋310
│  SERVER FUNCTION    │
│ FOR BROAD CATEGORIES│
└─────────────────────┘
          ↓
┌─────────────────────┐
│ GENERATE HTML WITH  │ ⟋316
│  HEADER, FOOTER AND │
│  BROAD CATEGORIES   │
└─────────────────────┘
          ↓
┌─────────────────────┐
│  SEND HTML TO CLIENT│ ⟋318
└─────────────────────┘
          ↓
┌─────────────────────┐
│  RECEIVE KEY WORD   │ ⟋320
│   SEARCH CRITERIA   │
│    FROM CLIENT      │
└─────────────────────┘
          ↓
┌─────────────────────┐
│ SEND CLIENT REQUEST │ ⟋330
│ TO CATALOGING FUNCTION│
└─────────────────────┘
          ↓
┌─────────────────────┐
│ RECEIVE WEB PAGE LIST│ ⟋332
│FROM CATALOGING FUNCTION│
└─────────────────────┘
          ↓
┌─────────────────────┐
│  SEND WEB PAGE LIST │ ⟋334
│     TO CLIENT       │
└─────────────────────┘
          ↓
┌─────────────────────┐
│ RECEIVE USER SELECTION│ ⟋340
│   OF URL FROM LIST  │
└─────────────────────┘
          ↓
┌─────────────────────┐
│ INCREMENT COUNTER FOR│ ⟋355
│  THIS USER AND THIS │
│CATEGORY OF SELECTED URL│
└─────────────────────┘
          ↓
┌─────────────────────┐
│ SEND USER SELECTION TO│ ⟋358
│ SOURCE OF SELECTED URL│
└─────────────────────┘
          ↓
┌─────────────────────┐
│ URL SOURCE PROVIDES │
│  SELECTED WEB PAGE  │
│  DIRECTLY TO USER   │
└─────────────────────┘
          ↓
      ┌────────┐
      │  END   │
      └────────┘
```
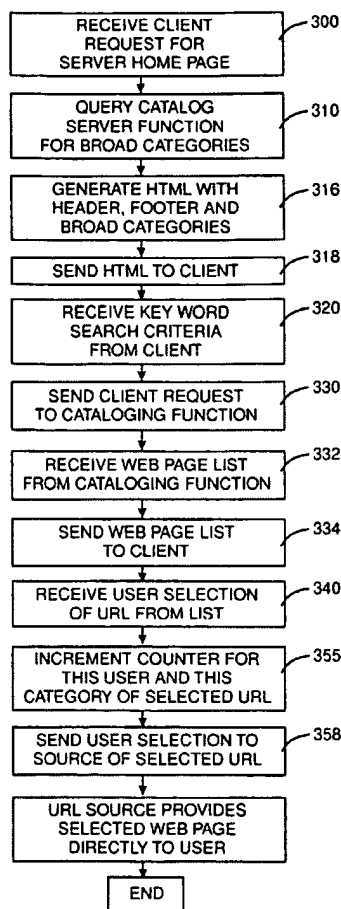
Figure 7

The method of Figure 7 and the associated description at most discloses that profile building function can obtain a web page data for a browser. This method does not disclose or suggest that web page data that is browsed by the client is acquired, or that this is acquired when the browser client newly browses the web page data.

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[62] Column 5, lines 27-28.

Because Barrera and Cole each do not disclose or suggest acquiring web page data in the manner recited in Appellants' independent claims, the combination does not disclose or suggest operating on such data in the manner recited in the remaining portions of these claims.

2.   One Skilled in the Art Would Not Have Been Motivated to Modify the Automated Web Page Collection Techniques of Barrera and Cole to Employ the Claimed Browser-Based Technique

As discussed above, Barrera discloses that a search engine can be optimized by searching the entire content of a web page, and not just web page descriptions. Thus, in order to optimize the search engines results, Barrera discloses using a spider to *automatically* gather website content. If, as is being proposed by the Office Action, Barrera were modified such that the website content were obtained based upon whether the content is browsed by a browser client, it could take a very long time until the website content is obtained. In fact, there would be many websites whose data is not obtained because, as explicitly disclosed by Barrera, keyword searching based only on descriptions – and not on content – could result in websites not being returned with search results because particular terms may not appear in the website descriptions. Thus, the modification of Barrera proposed in the rejection would result in an inferior search engine that returns inferior search results that only include websites actually browsed by a browser client.

In response to similar arguments raised by the Appellants the Advisory Action states that the "combination of Barrera and Cole is not less optimal; it just can alternative...While less data is collected, this is just an alternative not

less optimal depending on the goal."[63] It is well known that one of the most

important goals of all search engines is to catalog as many websites as possible.

If the search engine resulting from the proposed combination of Barrera and Cole

were put into practice this search engine, which is based on *less collected data,*

would be ignored by most users because users would prefer a search engine that

has cataloged as many websites as possible. Accordingly, a search engine that

catalogs less data *would be less optimal,* and one skilled in the art would not

have been motivated to produce a search engine that users would ignore in favor

of one with a much more robust catalog of data.

The Advisory Action also concludes that "a browser is obvious alternative

to a spider for collecting web page data."[64] Because browsers and spiders are

designed for entirely different purposes, it is respectfully submitted that they are

not obvious alternatives. Specifically, browsers are generally designed display

web pages requested by a user of the browser, while a spider is designed to crawl

across as many web pages as possible. This fundamental distinction, i.e., a

focused collection of information by a browser so as to not overwhelm a user

versus an exhaustive collection of data for processing by a computer,

demonstrates that these are not obvious alternatives, but instead have entirely

different purposes.

A misunderstanding of this fundamental distinction between browsers and

spiders appears to be the basis of the current rejection. Specifically, the Advisory

Action states that "Barrera uses web page data that while collected in a different

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[63] Page 2.
[64] Page 2.

manner than the claimed invention results in the same data being collected and stored."[65] As discussed above, the data obtained by the spider of Barrera tends to be exhaustive, while the data collected based on being browsed by a browser client would be much more limited, i.e., data of interest to the user of the browser client. Accordingly, there would be a fundamentally different data set based upon whether the data is collected based on whether it was browsed by a browser client or whether it was obtained by a spider.

3. The Combination of Barrera and Cole Does Not Disclose or Suggest Saving Browsed Data in the Manner Required by Claims 1, 121 and 122

Claims 1 and 121 recite saving all browsed data without any instructions by the user for each of the browsed data. Claims 1 and 122 recite that the web browser client data is saved when the browsing is operated to move to another URL. These features are not disclosed or suggested by the combination of Barrera and Cole.

The rejection of claim 121 cites column 4, lines 4-6 of Barrera and the rejection of claim 122 cites column 4, lines 21-22 of Barrera. Column 4, lines 4-6 of Barrera discusses that *a spider* automatically gathers and stores website content, and column 4, lines 21-22 states that the *spider* can be provided with a URL of a website and then can search the file corresponding to the URL. While this portion of Barrera does disclose automatically saving data *acquired by a spider*, there is nothing in this or any other section of Barrera disclosing or

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[65] Page 2.

suggesting that the saved data is "web browser client data" as recited in claims 1 and 122.

Furthermore, Barrera does not disclose when the spider saves the website content. Thus, Barrera does not disclose or suggest that the website content is saved by the spider "when the browsing is operated to move to another URL" as recited in claims 1 and 122.

Cole does not remedy the above-identified deficiencies of Barrera, and accordingly the combination of Barrera and Cole does not render claims 1, 121 and 122 obvious.

> 4. The Combination of Barrera and Cole Does Not Disclose or Suggest Saving Browsed Data in the Manner Required by Claims 99 and 145

In contrast to claims 1 and 121, which recite *automatically* saving data, claims 99 and 145 recite receiving a *save instruction from a user*. Claim 99 and 145 further recite that the web page data is saved when the save instruction is received.

As discussed above, the systems of Barrera and Cole acquire independently of browsing of web page data by a web browser client. Thus, Barrera and Cole are both silent with respect to receipt of a save instruction from a user or saving web page data in response to receipt of such an instruction.

Nevertheless, the rejection of claim 99 cites column 3, lines 55-65 and column 5, lines 17-19 of Barrera and states that "Vspider only runs and saves if a user tells it to and also users select categories and that information is saved after

user instruction."[66]   Column 3, lines 55-65 discusses that a memory stores website content and instructions that are executed by a processor to retrieve content to be stored and receive a category selection or keyword search from a user.   There is nothing in this section that discloses or suggests that a save instruction is received from a user or that web page data that is browsed by a browser client is saved in response to receipt of such an instruction.

Column 5, lines 17-19 discusses storing a dynamic index of URLs for websites associated with a category.   This section, however, does not discuss receiving a save instruction from a user or saving web page data that is browsed by a browser client in response to receipt of such an instruction.

Moreover, neither of the sections cited by the Office Action mentions the Vspider.   Nevertheless, even if it were assumed that there was some type of disclosure or suggestion in Barrera that a user tells the Vspider to save web pages – which Barrera does not – the web pages that would be saved in such a manner would not be web page data that is browsed by a browser client.

Additionally, for the rejection of claims 1 and 121 the Office Action interprets the action of the spider as automatically saving without any instruction from a user, while the Office Action then interprets *the exact same function* of the spider as also disclosing receiving a save instruction from a user. These interpretations are inconsistent, and thus only one could be correct.

Cole does not remedy these deficiencies of Barrera.   Accordingly, the combination of Barrera and Cole does not render claims 99 and 145 obvious.

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[66] Page 12.

5. The Combination of Barrera and Cole Does Not Disclose or Suggest Acquiring a URL From a Browser as Required by Claim 111

Claim 111 recites "acquiring a URL of the data from the browser as the second index." As discussed above, Barrera and Cole both disclose processes in which data is acquired independent of a browser. Accordingly, Barrera and Cole cannot disclose or suggest acquiring a *URL of the data from the browser* as recited in claim 111.

Nevertheless, the Office Action cites column 5, lines 17-19 of Barrera for this disclosure. This section of Barrera discloses a dynamic index of URLs for websites associated with a particular category. There is nothing in this or any other section of Barrera disclosing or suggesting that the dynamic index of URLs is "of the data from the browser." Cole does not remedy this deficiency of Barrera. Accordingly, the combination of Barrera and Cole does not render claim 111 obvious.

6. The Combination of Barrera and Cole Does Not Disclose or Suggest Acquiring a Title From a Browser as Required by Claim 112

Claim 112 recites "acquiring a title embedded in the data from the browser as the second index." As discussed above, Barrera and Cole both disclose processes in which data is acquired independent of a browser. Accordingly, Barrera and Cole cannot disclose or suggest acquiring a *title embedded in the data from the browser* as recited in claim 112.

Nevertheless, the Office Action cites column 5, lines 19-25 of Barrera for this disclosure, which is reproduced below.

> The dynamic index is used to track the identities of all websites that correspond to a selected category or categories. For example, in a hierarchical category system wherein a category includes certain other categories (e.g., the literature category includes the classics and modern romance categories), a dynamic index includes identifiers for all.

As is clear from a review of the section of Barrera cited above, there is no discussion of titles embedded in data, much less titles embedded in data from a browser. Cole does not remedy this deficiency of Barrera. Accordingly, the combination of Barrera and Cole does not render claim 112 obvious.

7. The Combination of Barrera and Cole Does Not Disclose or Suggest The Use of Nodes in the Manner Recited in Claims 113 and 114

Claim 113 recites that the index includes a time when data is saved, nodes corresponding to groups classified on the basis of the time of saving are created, a hierarchy of nodes is created by dividing a group corresponding to a period into a plurality of sub groups and displaying the plurality of created nodes in order of saving.

The Office Action cites column 4, lines 56-59 and column 5, lines 1-6 for the disclosure of all of the elements of claim 113. Column 4, lines 56-59 discloses correlating stored website content with a category, and column 5, lines 1-6 discusses the display and selection of categories and subcategories. Neither of the sections cited by the Office Action mention that the index includes a time when data is saved of creating a group of nodes, a hierarchy of nodes and displaying the created nodes in the manner recited in claim 113.

Page 37

Cole does not remedy this deficiency of Barrera. Accordingly, the combination of Barrera and Cole does not render claim 113 obvious.

Claim 114 depends from claim 113 and further recites that each group corresponds to a network session. The Office Action cites column 1, lines 10-14 of Barrera as disclosing this claim element. This section of Barrera discusses that the world wide web is a collection of websites on interconnected web servers on the Internet, and that collections of websites can also be stored on private networks. There is nothing in this or any other section of Barrera that discloses or suggests that each group that is classified on the basis of timing of saving corresponds to a network session.

Cole does not remedy this deficiency of Barrera. Accordingly, the combination of Barrera and Cole does not render claim 114 obvious.

B. The Combination of Barrera, Cole and Sidana Does Not Disclose or Suggest the Particular Arrangement of the System of Claims 53-57

Claims 53-57 are system claims that variously depend from independent claim 1. Each of these dependent claims recites a particular arrangement of elements between a server apparatus and a client apparatus. The rejection acknowledges that the combination of Barrera and Cole does not disclose or suggest these particular arrangements and instead relies upon Sidana. As will be discussed in more detail below, Sidana does not remedy the particular arrangements recited in claims 53-57.

1. <u>The Combination of Barrera, Cole and Sidana Does Not
   Disclose or Suggest the Client Database, Information Storage
   Device and Administration Means of Claim 53</u>

Claim 53 depends from claim 50, which recites a serer apparatus and a

client apparatus connected to a server apparatus. Claim 53 further recites that

at least one of the client apparatus comprises a client local database, a client web

information storage device for storing web information acquired from an

internet, and client administration means for administrating data in either of

said database, said local database, and said web information storage device.

Sidana discloses a system for annotating web-viewable documents.[67] As

illustrated in Figure 1 of Sidana (reproduced below), the system includes a client

computer 110 coupled to a redirector computer 120, which in turn is coupled to a
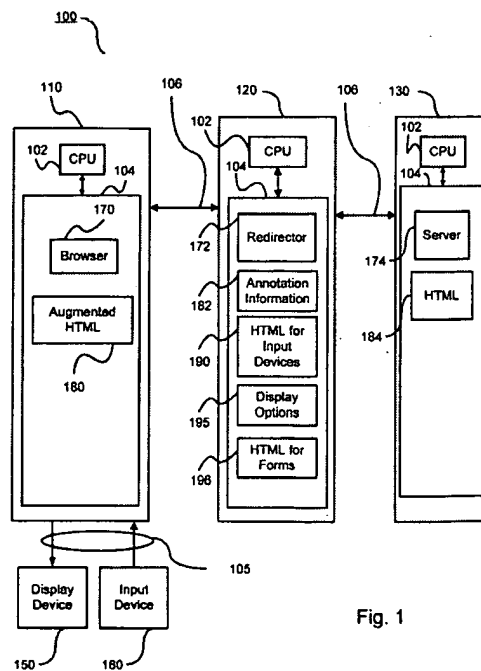
server 130.

Figure 1

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[67] Abstract.

As illustrated in Figure 1 of Sidana (reproduced above), client computer 110 includes a CPU 102 and a memory 104, which includes a browser 170 and augmented HTML 180. Sidana, however, does not disclose or suggest that client computer 110 includes:

- a client local database;
- a client web information storage device for storing web information acquired from an internet: and
- client administration means for administrating data in either of said database, said local database, and said web information storage device.

Nevertheless, the Office Action cites column 4, lines 20-21 of Sidana for the disclosure of the claimed client local database. This portion of Sidana states that "[e]ach computer 110, 120, and 130 includes a CPU 102 and a memory 104. First computer 110 also includes input/". Notably absent from this section of Sidana is any mention of a client local database. A mere mention of a memory does not disclose or suggest a database.

The Office Action cites column 4, lines 17-19 of Sidana for the disclosure of the claimed web information storage device. This section of Sidana states that "and a third computer 130. The first, second, and third computers are connected by network connections 106, such as internet connections or the connections of a LAN." This section of Sidana does not, however, mention a web information storage device that stores web information acquired from an internet.

The Office Action cites column 4, lines 31-36 of Sidana for the disclosure of the claimed administration means. This section of Sidana merely mentions that memory 104 of client computer 110 includes a browser 170 and data 180

representing augmented HTML. This section does not, however, mention "a client administration means for administrating data in either of said database, said local database, and said web information storage device."

Because Sidana is relied upon for the disclosure of the elements of claim 53, and Sidana does not disclose or suggest these elements, the combination of Barrera, Cole and Sidana does not render this claim obvious.

2. The Combination of Barrera, Cole and Sidana Does Not Disclose or Suggest the Client Apparatus of Claims 54-57

Claims 54-57 each depend from claim 1 and each recites different arrangements of the system, including different elements of a client apparatus. The Office Action, however, groups these claims together and provides only a single citation to Sidana for the disclosure of all of the elements of each of these claims. As will be described below, not only does Sidana not disclose or suggest the elements of claims 54-57, but the portion of Sidana cited in the Office Action does not even relate to the element disclosed by Sidana as a client computer.

Claim 54 recites that "said data acquisition means, said indexing means, and said saving means are equipped in at least one client apparatus connected to said server apparatus." Again, the Office Action relies upon Sidana for the disclosure of the claimed client apparatus, and Sidana only discloses that client computer 110 includes a CPU 102 and a memory 104, which includes a browser 170 and augmented HTML 180.

The Office Action cites column 10, lines 4-12 of Sidana for the disclosure of

all of the elements of claims 54-57. This section of Sidana is reproduced below:

> In another alternate embodiment, redirector 172 can perform an indexing and search function in addition to or instead of the annotation function discussed above. For example, redirector 172 can include search software, such as a full-text search engine (e.g., the "FULCRUM" search engine, available from Fulcrum Software, Inc.). In this embodiment, each time HTML 184 is received from server 174, redirector 172 indexes all text in the HTML 184 and stores the resulting search indices in its memory. Search

As clearly illustrated in Figure 1 of Sidana (reproduced above), redirector

172 is a component of redirector computer 120, which is separate from, and

coupled to, client computer 110. Thus, there is nothing in this section of Sidana

supporting the disclosure that client computer 110 includes "said data

acquisition means, said indexing means, and said saving means."

Claim 55 recites that "said data acquisition means, said indexing means,

said saving means, and said database are equipped in each of said client

apparatuses, and each of said client apparatuses can access the database

equipped in another client apparatus." Again, the Office Action's reliance upon

Sidana's disclosure of the redirector computer 120 does not disclose or suggest a

client apparatus that includes "said data acquisition means, said indexing

means, said saving means, and said database."

Furthermore, there is no discussion in Sidana that "each of said client

apparatuses can access the database equipped in another client apparatus."

Claim 56 recites that "said database is equipped in a server apparatus,

and index database for storing the indices of said database is equipped in at least

one client apparatus connected to said server apparatus." Sidana's disclosure of

the redirector computer 120 does not disclose or suggest that client computer has an index database that stores indices of a database in a server apparatus.

Claim 57 recites that "said data acquisition means, said indexing means, said saving means, and said database are equipped in a server apparatus, said data acquisition means acquires data in an internet, and said system further comprising at least one browser connected to said server apparatus, each of said browser browses a web page in the internet via said server apparatus and transmits a user action on the browsed web page to said server apparatus." Sidana does not disclose or suggest that the server apparatus includes a data acquisition mean, indexing means, saving means and the database in a server.

Barrera and Cole each do not remedy the above-identified deficiencies of Sidana with respect to claims 54-57. Accordingly, the combination of Barrera, Cole and Sidana does not render claims 54-57 obvious.

C. The Combination of Barrera, Cole and Walls Does Not Render Claims 73 and 108-110 Obvious

Appellants' claims 73 and 108-110 recite various techniques for assigning file names and folder names. The rejection of these claims relies upon Walls for the disclosure of the claimed techniques. Walls, however, does not disclose or suggest the creation of file and folder names in the manner recited in claims 73 and 108-110.

Walls discloses a system that generates an index to improve access to documents in a large database.[68] This index allows a user to find information using an alphabetical index (as illustrated in Figure 8 of Walls reproduced

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[68] Abstract.

below), or by using a keyword search (as illustrated in Figure 10 of Walls

reproduced below).

FIG. 8   FIG. 10
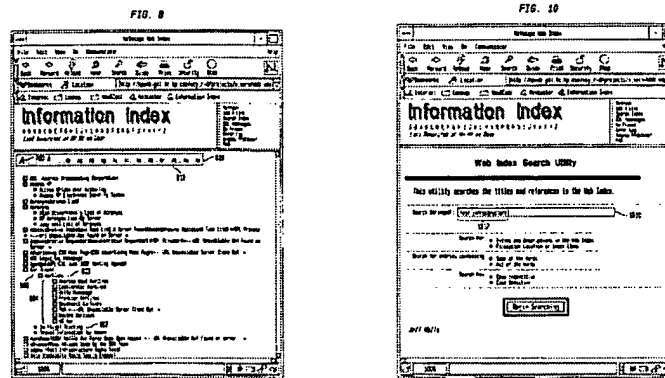
Although the Background of the Invention section of Walls discusses a

user assigning descriptive names to folders and sub-folders, and amending the

descriptive names, Walls does not disclose assigning folder or file names in the

manner recited in claims 73 and 108-110. Instead of relying upon folder or file

names for indexes, Walls discloses obtaining the information about a file from

the file header, which includes "the name of the author of the file, the title of the

file, and one or more keywords that describe the content of the file or are

intended to help users find the file."[69]

Despite the fact that claims 73 and 108-110 recite different claim

elements, the Office Action commonly rejects these claims based on the language

of claims that have been canceled. The currently pending claim with language

closest that cited in the Office Action is claim 108. Accordingly, the following

discussion addresses how the citations to Walls for the elements of claim 108 not

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[69] Column 14, lines 20-23.

only do not disclose or suggest the elements of claim 108, and also do not disclose

or suggest the elements of claims 73, 109 and 110.

    1.   The Combination of Barrera, Cole and Walls Does Not Disclose
           or Suggest Assigning a Predetermined File Name as Required
           by Claim 108

Claim 108 depends from claim 59 and further recites, *inter alia*, assigning

a predetermined name to the newly browsed data without intervention by a user

and saving the newly browsed data in a new folder with the assigned file name.

The Office Action cites column 9, lines 3-9 of Walls for the disclosure of the

claimed assigning a predetermine name, and column 12, lines 13-22 and Figures

2 and 3 of Walls for saving the newly browsed data with the assigned file name.

Column 9, lines 3-9 of Walls is reproduced below:

> The index of this embodiment may advantageously be arranged
> alphabetically according to the keywords. Thus, having once
> selected the file system or systems (hereafter, simply "selected file
> system") to be indexed, the user may thereafter readily find files of
> interest by consulting the alphabetical index of keywords and
> selecting specific files based on their titles. The titles typically will
> be arranged

Noticeably absent from this section of Walls is any discussion assigning a

predetermined file name without user intervention. Instead, this section at most

discloses selecting a file system for indexing and then finding the files based on

keywords and titles.

Column 12, lines 13-22 discloses using file name extensions for

determining whether to search files for the purposes of indexing; Figure 2

illustrates the files system identifier, index builder and display manager; and

Figure 3 illustrates the file scanner. Nothing in these cited sections discloses or

suggests that newly browsed data is saved in a folder with an assigned file name, where the file name is predetermined and assigned without user intervention.

2. The Combination of Barrera, Cole and Walls Does Not Disclose or Suggest Creating a Folder Name in the Manner Required by Claim 109

Claim 109 depends from claim 108 and further recites that "the new folder is created with a folder name created based on a predetermined rule." Walls, however, does not disclose or suggest creating folder names based on predetermined rules, and the Office Action has not provided a citation to Walls for this disclosure. Accordingly, the combination of Barrera, Cole and Walls does not render claim 109 obvious.

3. The Combination of Barrera, Cole and Walls Does Not Disclose or Suggest Creating a Unique File Name in the Manner Required by Claim 110

Claim 110 depends from claim 59 and further recites that the saving involves "generating a unique file name to be assigned as the first index for the newly browsed data without intervention by a user." Walls, however, does not disclose or suggest generating unique file names, and the Office Action has not provided a citation to Walls for this disclosure. Accordingly, the combination of Barrera, Cole and Walls does not render claim 110 obvious.

4. The Combination of Barrera, Cole and Walls Does Not Disclose or Suggest Assigning a Predetermined File Name as Required by Claim 73

Claim 73 depends from claims 72 and 60, and further recites "assigning a predetermined file name to said newly browsed data." As discussed above, Walls does not disclose or suggest assigning a predetermined file name to newly

browsed data. Accordingly, the combination of Barrera, Cole and Walls does not render claim 73 obvious.
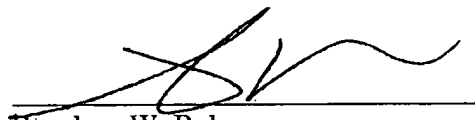
VIII. CONCLUSION

For at least the forgoing reasons, the rejections of claims 1, 50, 52-57, 59-61, 63, 64, 66, 67, 69, 72, 73, 75-77, 93, 97, 99, 101-145 and 147-178 for obviousness should be reversed.

The Commissioner is hereby authorized to charge any deficiency, or credit any overpayment, to Deposit Account No. 05/1323, Docket No.: 103251.58983US.

Respectfully submitted,

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CLAIMS APPENDIX

1.   A system for saving web page data, including a processor and a storage medium storing a computer-executable program, said program comprising codes for causing said processor to perform as:

data acquisition means for acquiring a web page data browsed by a browser client when said browser client newly browses the web page data;

keyword extraction means for extracting a keyword from a content of the acquired web page data;

indexing means for assigning a plurality of indices that include a first index unique to the acquired web page data and a second index comprising the extracted keyword to the acquired web page data;

saving means for saving the acquired web page data in correspondence with the assigned indices in a predefined database, the saved web page data being sufficient to regenerate at least a portion of a previously browsed web page without accessing to the original source;

setting means for setting to save all the browsed data without any instruction by the user for each of the browsed data, wherein said saving means saves the data browsed by the browser client when the browsing is operated to move to another URL.

Claims 2-49 (Canceled)

50.   The system according to Claim 1, wherein said data acquisition means, said indexing means, said saving means, and said database are equipped in a server apparatus, and said system further comprising at least one client apparatus connected to said server apparatus, each of said client apparatus transmits a user request to said server apparatus and receives a response to the user request from said server apparatus.

Claim 51 (Canceled)

52.   The system according to Claim 50, wherein said server apparatus further comprising:

a local database;

a web information storage device for storing web information acquired from an internet: and

administration means for administrating data in either of said database, said local database, and said web information storage device.

53.   The system according to Claim 52, wherein at least one of said client apparatus further comprising:

a client local database;

a client web information storage device for storing web information acquired from an internet: and

client administration means for administrating data in either of said database, said local database, and said web information storage device.

54.   The system according to Claim 1, wherein said database is equipped in a server apparatus, and said data acquisition means, said indexing means, and said saving means are equipped in at least one client apparatus connected to said server apparatus.

55.   The system according to Claim 1, wherein said system includes a plurality of client apparatuses, and said data acquisition means, said indexing means, said saving means, and said database are equipped in each of said client apparatuses, and each of said client apparatuses can access the database equipped in another client apparatus.

56. The system according to Claim 1, wherein said database is equipped in a server apparatus, and index database for storing the indices of said database is equipped in at least one client apparatus connected to said server apparatus.

57. The system according to Claim 1, wherein said data acquisition means, said indexing means, said saving means, and said database are equipped in a server apparatus, said data acquisition means acquires data in an internet, and said system further comprising at least one browser connected to said server apparatus, each of said browser browses a web page in the internet via said server apparatus and transmits a user action on the browsed web page to said server apparatus.

58. (Canceled)

59. A storage medium storing computer-executable program for controlling a computer to perform data processing for saving web page data, said program comprising codes for causing the computer to perform:

acquiring web page data browsed by a browser client when said browser client newly browses the web page data;

extracting a keyword from a content of the acquired web page data;

assigning a plurality of indices that include a first index unique to the acquired web page data and a second index comprising the extracted keyword to the acquired web page data; and

saving the web page data in correspondence with the assigned indices in a predefined database, the saved web page data being sufficient to regenerate at least a portion of a previously browsed web page without accessing to the original source.

60.   A method of saving web page data comprising:

acquiring web page data browsed by a browser client when said browser client newly browses the web page data;

extracting a keyword from a content of the acquired web page data;

assigning a plurality of indices that include a first index unique to the acquired web page data and a second index comprising the extracted keyword to the acquired web page data; and

saving the acquired web page data in correspondence with the assigned indices in a predefined database, the saved web page data being sufficient to regenerate at least a portion of a previously browsed web page without accessing to the original source.

61.   The method of Claim 60, wherein said index is dynamically generated.

62. (Canceled)

63.   The method of Claim 60, further comprising:

retrieving data from said database based on a user-supplied index.

64.   The method of Claim 60, further comprising:

sorting indices of the data saved in the database; and

displaying a result of said sorting indices on a display unit.

65. (Canceled)

66.   The method of Claim 64, further comprising:

selecting an index from the indices displayed; and

retrieving data corresponding to the index selected from the database.

67.   The method of Claim 66, further comprising:

deleting at least one index from the indices displayed on said display unit;

and

removing data corresponding to said deleted index from the database.

68. (Canceled)

69.   The method of Claim 60, further comprising: sending the acquired data to

a predetermined destination.

70. (Canceled)

71. (Canceled)

72.   The method of Claim 60, further comprising:

creating a new folder for newly browsed data in said database.

73.   The method of Claim 72, further comprising:

assigning a predetermined file name to said newly browsed data.

74. (Canceled)

75.   The method of Claim 60, further comprising editing the browsed data.

76.   The method of Claim 75, wherein said editing includes adding an annotation to the browsed data, said annotation is distinguishable from the browsed data.

77.   The method of Claim 60, further comprising:

extracting a predetermined type of data from the browsed data; and

saving the extracted data in the storage unit.

Claims 78-92. (Canceled)

93.   A storage medium storing computer-executable program for controlling a computer to perform data processing for saving web page data said program comprising codes for causing the computer to perform:

acquiring web page data browsed by a browser client when said browser client newly browses the web page data;

extracting a keyword from a content of the acquired web page data requested for saving;

assigning a plurality of indices that include a first index unique to the acquired web page data and a second index comprising the extracted keyword to the acquired web page data;

determining whether a user requests saving of the acquired web page data; and

saving the requested data in correspondence with the assigned indices in a predefined database when it is determined that the user requests saving of the acquired web page data, the saved web page data being sufficient to regenerate at least a portion of a previously browsed web page without accessing to the original source.

Claims 94-96 (Canceled)

97.   The method of Claim 60, further comprising:

receiving an index; and

searching the database for web page data stored in correspondence with the same index as the received index.

Claim 98. (Canceled)

99.   A method of saving web page data comprising:

acquiring web page data browsed by a browser client when said browser client newly browses the web page data;

extracting a keyword from a content of the acquired web page data;

assigning a plurality of indices that include a first index unique to the acquired web page data and a second index comprising the extracted keyword to the acquired web page data;

saving the acquired web page data in correspondence with the assigned indices in a predefined database, the saved web page data being sufficient to regenerate at least a portion of a previously browsed web page without accessing to the original source;

receiving a save instruction from a user, wherein the indices are assigned to the web page data in said assigning step and the web page data is saved in said saving step when the save instruction is received.

Claim 100.   (Canceled)

101. The storage medium of Claim 59, further comprising codes for causing a computer to perform:

generating the first index which is other than data extracted from the acquired web page data.

102. The method of Claim 60, further comprising generating the first index which is other than data extracted from the acquired web page data.

103. The storage medium of Claim 93, further comprising codes for causing the computer to perform:

generating the first index which is other than data extracted from the acquired web page data.

104. The storage medium of Claim 59, further comprising codes for causing the computer to perform:

sorting indices of the data in the database; and

displaying a result of the sorting.

105. The storage medium of Claim 104, further comprising codes for causing the computer to perform:

selecting an index from the displayed indices; and

retrieving data corresponding to the selected index from the database.

106. The storage medium of Claim 104, further comprising codes for causing the computer to perform:

deleting at least one index from the displayed indices; and

removing data corresponding to the deleted index from the database.

107. The storage medium of Claim 104, wherein at least one of the data has a plurality of values for an index, and the plurality of values are placed at positions corresponding to respective values.

108. The storage medium of Claim 59, wherein the saving comprises codes for causing the computer to perform:

creating a new folder for newly browsed data;

assigning a predetermined name to the newly browsed data without intervention by a user; and

saving the newly browsed data in a new folder with the assigned file name.

109. The storage medium of Claim 108, wherein the new folder is created with a folder name created based on a predetermined rule.

110. The storage medium of Claim 59, wherein the saving comprises codes for causing the computer to perform:

generating a unique file name to be assigned as the first index for the newly browsed data without intervention by a user.

111. The storage medium of Claim 59, wherein the assignment of a plurality of indices includes acquiring a URL of the data from the browser as the second index.

112. The storage medium of Claim 59, wherein the assignment of the plurality of indices includes acquiring a title embedded in the data from the browser as the second index.

113. The storage medium of Claim 59, wherein the index includes a time when the data is saved, said storage medium further comprising codes for causing the computer to perform:

creating nodes corresponding to groups classified on the basis of the timing of saving;

creating a hierarchy of nodes by dividing a group corresponding to a period into a plurality of sub group each corresponding to a shorter period and creating a node corresponding to each of sub group; and

displaying a plurality of the created nodes in an order of saving.

114. The storage medium of Claim 113, wherein each group corresponds to a network session.

115. The storage medium of Claim 59, wherein the saving comprises codes for causing the computer to perform:

assigning a word specified by a user as a further index to the data to be saved.

116. The storage medium of Claim 59, wherein when an index assigned to the data to be saved has been assigned to other data, the data is saved as a new data or updates the other data according to a setting by the user.

117. The storage medium of Claim 59, wherein when an index assigned to the data to be saved has been assigned to other data, the user is inquired as to whether the data is to be saved as a new data or an updated data.

118. The storage medium of Claim 59, wherein the data is saved in correspondence with an effective period, and the storage medium further comprising codes for causing the computer to perform:

comparing the effective period with a current time at a predetermined timing; and

removing data in correspondence with the effective period before the current time based upon the result of a comparison.

119.   The storage medium of Claim 59, wherein the browsed data is saved in a first save mode and a URL for the browsed data is saved in place of the browsed data in a second save mode.

120.   The storage medium of Claim 59, further comprising codes for causing the computer to perform:

setting whether or not data linked to the browsed data is to be saved with the browsed data.

121.   The storage medium of Claim 59, further comprising codes for causing the computer to perform:

setting to save all the browsed data without any instruction by the user for each of the browsed data.

122.   The storage medium of claim 121, wherein the browser client data is saved when the browsing is operated to move to another URL.

123.   The storage medium of Claim 59, further comprising codes for causing the computer to perform:

setting not to save the browsed data in a URL specified by the user.

124.   The storage medium of Claim 59, further comprising codes for causing the computer to perform:

extracting as an index a specific data from a data train constituting
address of the browsed data in the network on the basis of a predetermined rule.

125. The storage medium of Claim 124, wherein the specific data is a domain
name.

126. The storage medium of Claim 125, wherein the predetermined rule is a
rule for eliminating a parameter, a protocol, an obvious address, and page data
from the data train, and extracting a domain name from the rest of the data by
referring to a knowledge base of domain names.

127. The storage medium of Claim 124, wherein the specific data is a name of
organization.

128. The storage medium of Claim 127, wherein the predetermined rule is a
rule for eliminating a parameter, a protocol, an obvious address, page data, and
domain name from the data train, and determining the rest of the data as an
organization name.

129. The storage medium of Claim 127, wherein the predetermined rule
includes a rule for dividing the rest of the data into partial data with a
predetermined symbol and determining each of the partial data as an
organization name.

130.   The storage medium of Claim 59, further comprising codes for causing the computer to perform:

sending the acquired web page data or a specific part thereof to a destination.

131.   The storage medium of Claim 130, wherein the specific part is a URL of the saved data.

132.   The storage medium of Claim 130, wherein the specific part is the saved data except for an embedded image.

133.   The storage medium of Claim 59, further comprising codes for causing the computer to perform:

editing the browsed data.

134.   The storage medium of Claim 133, wherein said editing includes adding an annotation to the browsed data.

135.   The storage medium of Claim 134, wherein said annotation is added in such a manner that the annotation is distinguishable from the browsed data.

136.   The storage medium of Claim 133, wherein said editing includes changing a display form of a designated portion in the browsed data.

137.   The storage medium of Claim 59, further comprising codes for causing the computer to perform:

extracting a predetermined type of data from the browsed data; and

saving the extracted data in the database.

138.   The storage medium of Claim 137, wherein said data is extracted in a predetermined column in response to a copying operation of data from a specified portion of the browsed data to the predetermined column, and the extracted data is saved with an attribute corresponding to the predetermined column.

139.   The storage medium of Claim 137, wherein the predetermined type of data includes at least one of an organization name, a person name, an Email address, a telephone number, a Fax number, and a keyword appended to the data.

140.   The storage medium of Claim 59, wherein when the data requested to be saved includes data from other URL identified in the web page data, the included data from the other URL is downloaded.

141. The storage medium of Claim 140, when the data from the other URL is already available in the storage unit, the downloading of the data is not performed.

142. The storage medium of Claim 59, further comprising codes for causing the computer to perform:

   selecting an automatic save mode, and in the automatic save mode,

   determining a condition to be satisfied to save the browsed data every time a new web page is browsed.

143. The storage medium of Claim 112, wherein the assignment of a plurality of indices includes displaying the extracted keyword or the title acquired from the browser.

144. The storage medium of Claim 59, further comprising codes for causing the computer to perform:

   receiving an index; and

   searching the database for web page data stored in correspondence with the same index as the received index.

145. The storage medium of Claim 59, further comprising codes for causing the computer to perform:

receiving a save instruction from a user, wherein the assignment of the plurality of indices includes assigning the indices to the web page data, and the saving includes saving the web page data when the save instruction is received.

146. (Canceled)

147. A method of saving web page data by a system, the method comprising:

acquiring web page data browsed by a browser client when said browser client newly browses the web page data;

extracting a keyword from a content of the acquired web page data;

assigning a plurality of indices that include a first index unique to the acquired web page data and a second index comprising the extracted keyword to the acquired web page data;

saving the acquired web page data in correspondence with the assigned indices in a predefined database, the saved web page data being sufficient to regenerate at least a portion of a previously browsed web page without accessing to the original source, wherein the index includes a time when the data is saved;

creating nodes corresponding to groups classified on the basis of the timing of saving;

creating a hierarchy of nodes by dividing a group corresponding to a period into a plurality of sub group each corresponding to a shorter period;

creating a node corresponding to each of sub group; and

displaying a plurality of nodes the created nodes in an order of saving.

148.   A method of saving web page data comprising:

acquiring web page data browsed by a browser client when said browser client newly browses the web page data;

extracting a keyword from a content of the web page data acquired from the browser client;

assigning a plurality of indices that include a first index unique to the web page data acquired from the browser client and a second index comprising the extracted keyword to the web page data acquired from the browser client;

saving the web page data acquired from the browser client in correspondence with the assigned indices in a predefined database, the saved web page data being sufficient to regenerate at least a portion of a previously browsed web page without accessing to the original source.

EVIDENCE APPENDIX

None

RELATED PROCEEDINGS APPENDIX

None